Company Profile

苏州纽姆特纳米科技有限公司
Suzhou Newmat Nanotechnology Co., Ltd

2025英文版

Newmat

Content

Introduction to Suzhou Newmat Nanotechnology Co., Ltd.

COMPANY PROFILE

It is located in **Zhangjiagang City, Suzhou.**

- **Committed to providing advanced powder material solutions.**
- **Pioneer in the field of fluidized bed reactor anodes.**

Proprietary technology

- **It is one of the few companies in China that have the capability to design, manufacture, and install fluidized bed reactors.**
- **In 2013, it realized the first industrial-scale fluidized bed reactor equipment for lithium iron phosphate coating.**

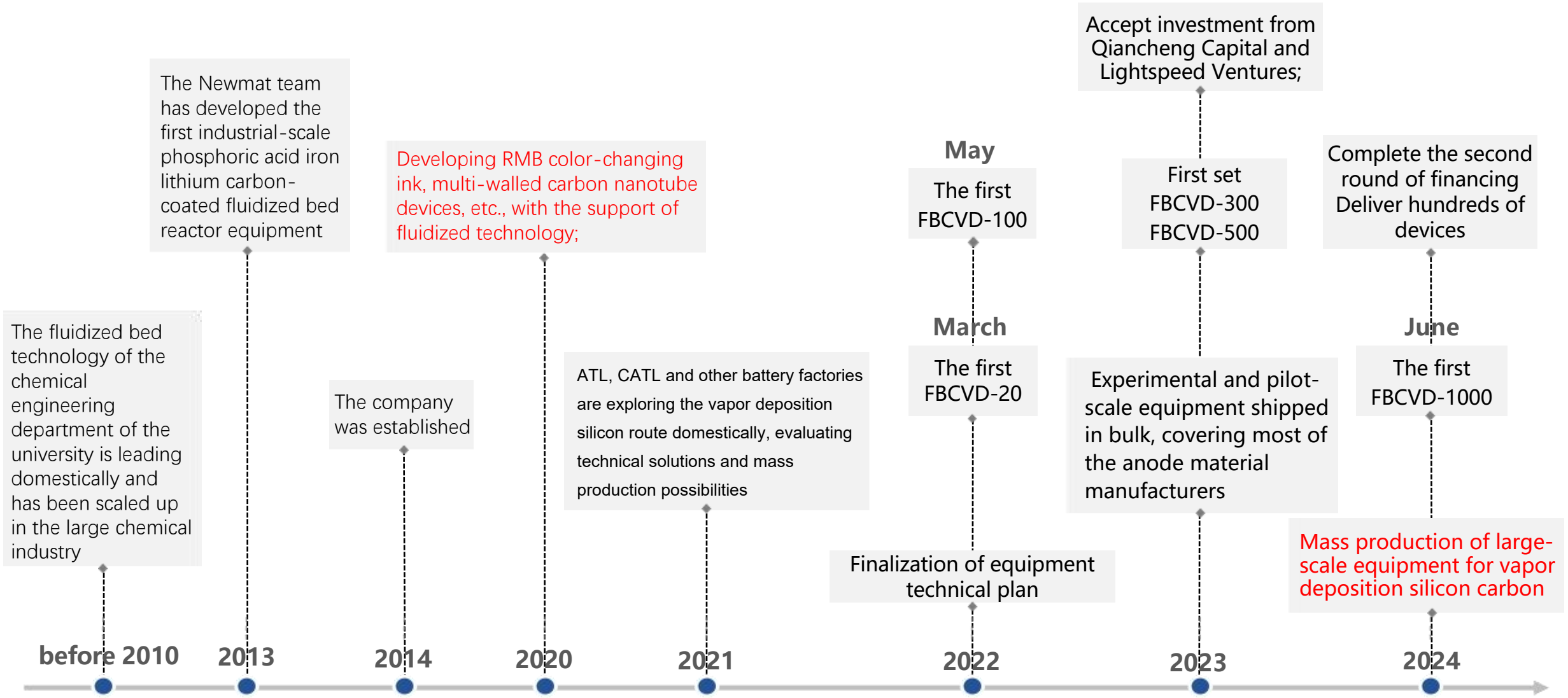
Core team

- **Most of the core members are graduates from prestigious universities such as Beijing University of Chemical Technology and Tsinghua University.**
- **Core members have worked in the development, application, and large chemical industry of lithium-ion battery materials.**

Existing customers

- **Main customer orientation 1: Companies producing silicon carbon anode materials.**
- **Major customer direction 2: Provide production and R&D equipment for single-walled carbon nanotubes, porous carbon activation, and graphite etching, etc., and carry out material coating modification work, etc. Cooperate with leading lithium-ion cathode material enterprises, and conduct coating and sintering experiments.**
- **Expanding the t`arget customer base: including the catalyst industry, pharmaceutical industry, precious metal industry, and 3D printing material industry, etc**

Company Development History



Company Size

500 sets of annual generation capacity

500 sets of annual production capacity. By 2023, the company's production site will expand to 8000 square meters.

Collaboration with hundreds of enterprises

At present, our company has cooperated with negative electrode material manufacturers, with a market share of 90%.

Zhangjiagang Talent Enterprise

The team members come from prestigious universities at home and abroad, and the core members have work experience in the development, application, and large-scale chemical industry of lithium battery materials.

Newmat Nano-Core Team: Top Battery Factory Background+Top Fluidized Bed Technology

Newmat

Chairman&General Manager

Han Jing

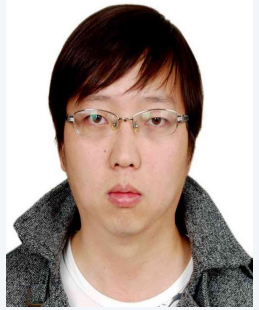
- **Master's degree from Beijing University of Chemical Technology**
- **The current General Manager of Newmat, who has worked at CATL, Sinochem International, Azure Lithium, etc;**
- Have a profound understanding of battery materials and equipment engineering technology.

Vice General Manager&CTO

Dr. Qian Zhen

- **PhD from Tsinghua University**
- The current Vice President&CTO of Newmat is responsible for research and development work.
- Formerly served as Chief Engineer of Tianchen Company's R&D Center, Dean of Yitai Group Research Institute, Director of Peking University Ordos Research Institute, and Director of Inner Mongolia Chemical Association.

Vice General Manager

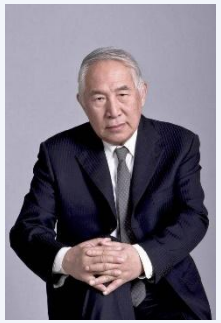


Liu Kai

- **Undergraduate program at Xinjiang University**
- Current Vice President of Newmat.
- Previously worked at Dongchen Chemical Industry and China Construction Installation, with years of experience in chemical production and safety management, possessing extensive knowledge in chemical processes, safety, and project management in the chemical industry.

Newmat Nano-Core Team: Top Battery Factory Background+Top Fluidized Bed Technology

Fluidized technology



- Academician Jin Yong is a chemical engineering expert and educator, academician of the Chinese Academy of Engineering, dean of the Institute of Chemical Science and Technology, Tsinghua University, and professor of the Department of Chemical Engineering.

Academician Jin Yong
Technical Advisor

- Engaged in teaching and research work on high-speed fluidization, clean chemical processes, and powder technology for many years.
- He has received numerous national and ministerial-level science and technology awards, including the Second Prize of the National Technology Invention and the Second Prize of the National Science and Technology Progress. He has also been honored with the National May 1st Labor Medal and the National Outstanding Teacher. In 2021, he was awarded the "Lifelong Achievement Award in Fluidization" at the 13th International Fluidized Bed Technology Conference.

Battery materials

- Tenured Professor of Tsinghua University

Professor Zhang Qiang
Technical Advisor

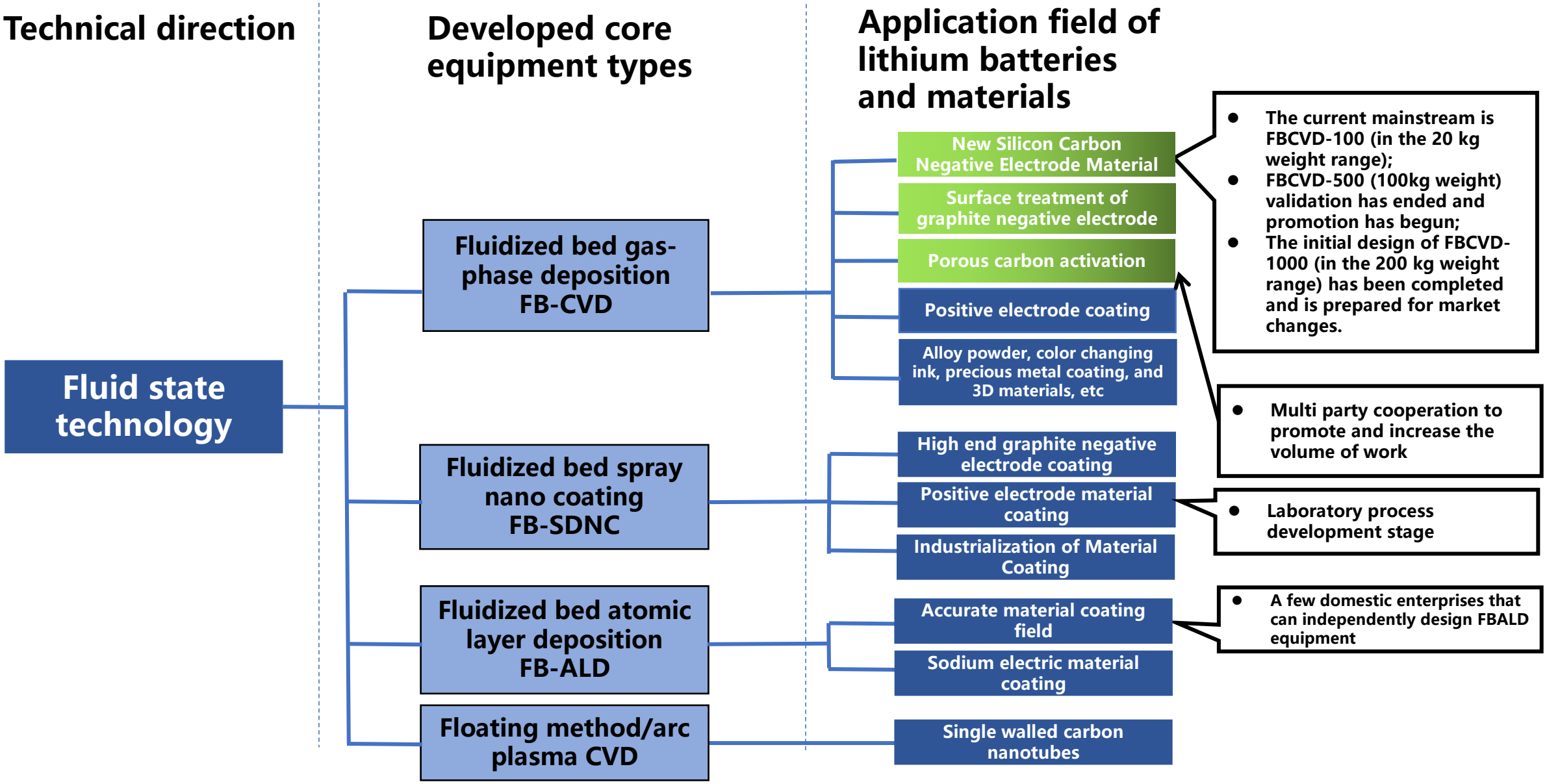
- He has won the Outstanding Young Scholar Fund of the National Natural Science Foundation of China, the China Youth Science and Technology Award, the Youth Science Award of the Ministry of Education, the Beijing Youth May Fourth Medal, the Tian Zhaowu Award of the International Electrochemical Conference, and the Young Scientist Award for Sustainable Development. From 2017 to 2023, he was named "Global Highly Cited Researcher" for seven consecutive years.

- Vice Dean of the School of Chemistry and Chemical Engineering, South China University of Technology, Professor, Doctoral Supervisor.

Professor Yu Hao
Technical Advisor

- Selected as New Century Excellent Talents of the Ministry of Education (2012), Outstanding Youth Fund of the Natural Science Foundation of Guangdong Province (2012), One Hundred and Ten Provincial Trainees of Guangdong Province (2014), the Pearl River Science and Technology Star of Guangzhou (2011). Serving as a council member of the China Particle Society, Deputy Secretary General of the Guangdong Chemical Industry Society, Chairman of the Science Popularization and Academic Work Committee, editorial board member of "Chemical Industry Progress" and "Chemical Higher Education".

Newmat Nano-Current Product System



Newmat Nano-Product System

Fluidized bed chemical vapour deposition reactor
FB-CVD

FBCVD-10

FBCVD-20

FBCVD-500

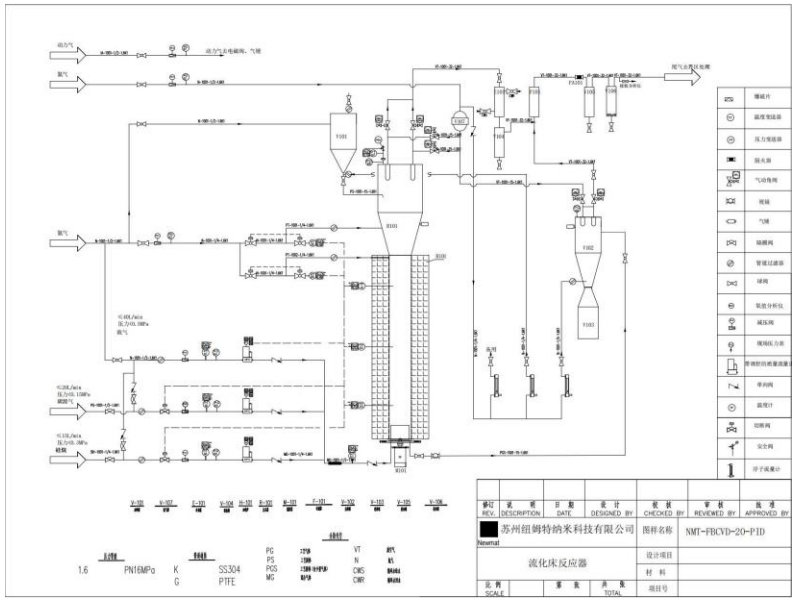
FBCVD-100

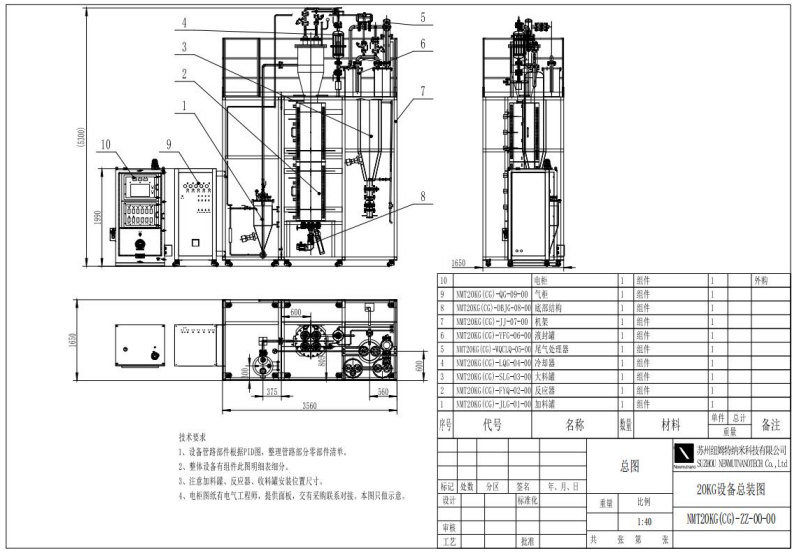
FBCVD-1000

Newmat Nano-Product System

Fluidized bed chemical vapour deposition reactor FB-CVD

- FB-CVD (Fluidized bed chemical vapor deposition)
- In the reactor, fluidization is carried out by air flow, and the reactants are suspended for reaction;
- The fluidized bed is currently the most ideal deposition equipment for powder material CVD coating process;
- Can be applied to powder sintering process.
- Suitable for fluidization of powder materials with D50=2~1000 μm.





FBCVD-20
PID Diagram

Newmat Nano-Product System

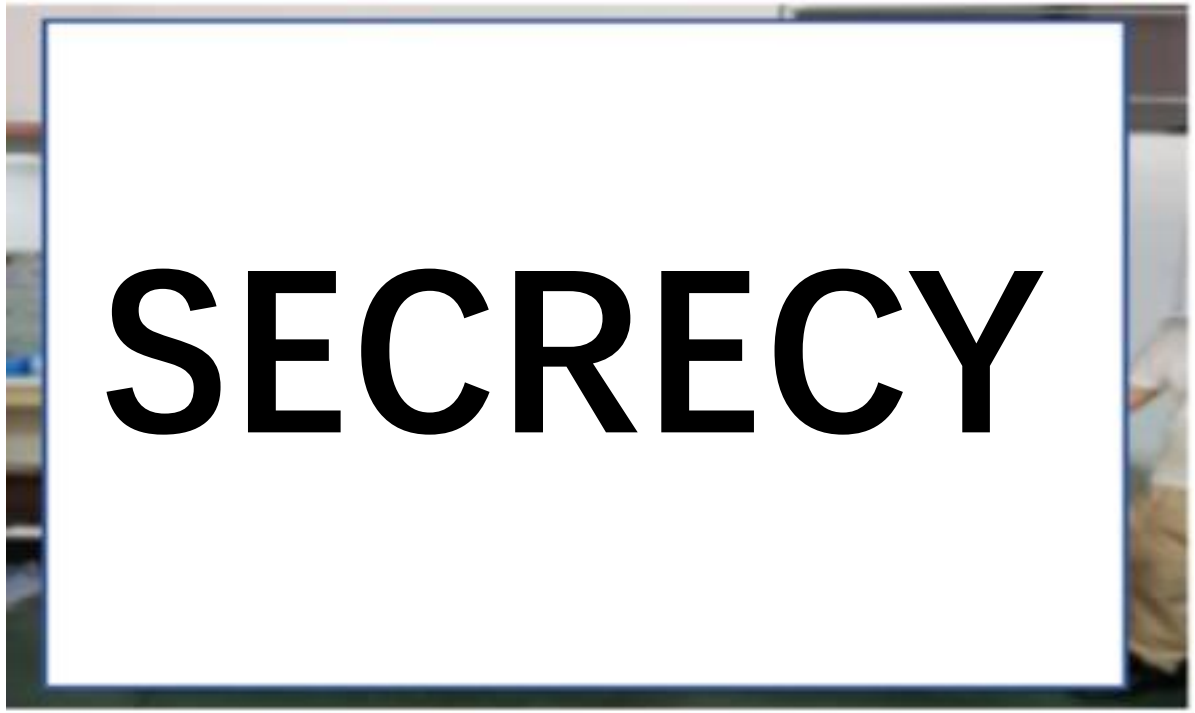
Fluidized bed atomic layer deposition

FBALD-0.5 and FBALD-20

- FB-ALD (ALD, Atomic Layer Deposition) is a newly developed deposition method.
- Single layer atomic deposition on the substrate surface.
- It can achieve uniform deposition with atomic level accuracy.
- Suitable for sedimentation processes with high aspect ratios.
- Newmat and a team of domestic experts have developed FBALD technology suitable for powders.

Newmat Nano-Product System

Single walled carbon nanotube equipment



- Both process routes can be chosen;
- Preparation of single-walled powder with high purity;
- High equipment process matching and deep overall optimization of material costs;
- Can assist in the construction of CNT powder research and production equipment.
- The team has rich experience in CVD vapor deposition of carbon nanotubes and is one of the few domestic enterprises that can customize designs based on customer site layouts.

Newmat Nano-Product System

Fluidized bed spray nano coating

FB-SDNC

- The powder adopts dispersed fluidization and uniform coating of fine droplets;
- The coating agent has a wide range of sources;
- Easy to scale up and industrialize;
- The coating layer can be controlled at the level of 10nm;
- The reaction system combines fluidized bed reactor technology and spray drying technology
- Efficient and thickness controllable coating deposition can be achieved;

Newmat Nano-Laboratory

- The laboratory covers an area of 3000m^2;
- Having over 10 sets of testing and inspection equipment;
- The annual number of experiments is about 1800 times;
- Having a team of over 10 highly qualified and specialized researchers;

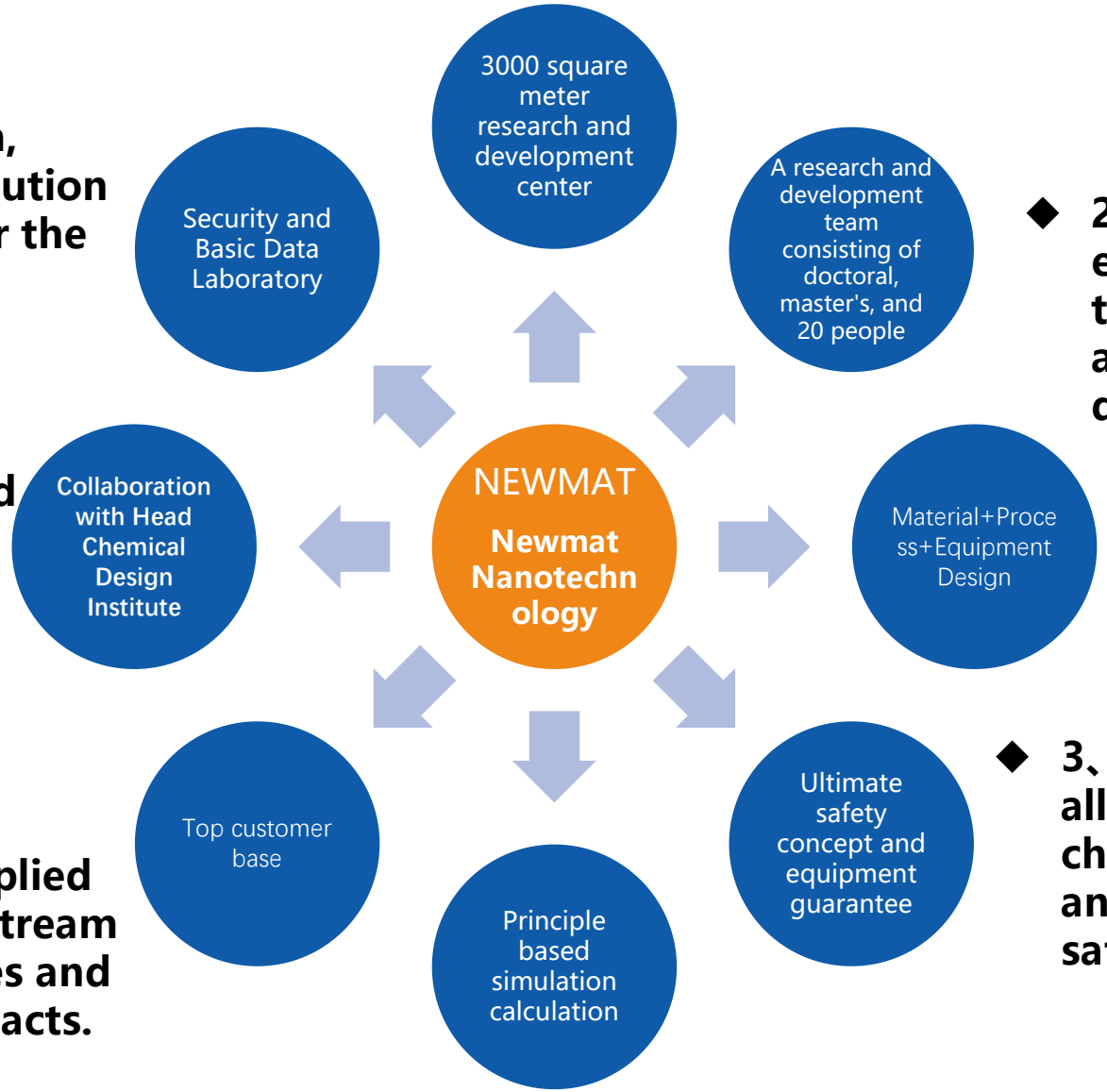
- Scientific layout, spacious and bright;
- There are experimental operation area, precision instrument area, sample equipment storage area, etc;
- Team members have rich experience and profound academic achievements;
- Having basic theories, reaction processes, process control, and industrial applications;

Newmat Nano-After sales Service

- We have a highly qualified and professional service team of over 30 people;
- Customer centered, wholeheartedly for customers, worry free after-sales service;
- Having solid professional knowledge and skills;
- Capable of quickly and accurately resolving customer issues;
- Pay attention to changes in customer needs and adjust service content and methods in a timely manner;
- Responsible for handling returns and exchanges of customer products, ensuring the protection of customer rights and interests;

Newmat Nano-Business Philosophy

- 1、Provide basic data, security data, and solution recommendations for the industry.
- 2、Focus on building an equipment enterprise that emphasizes material and process research and development
- 3、The core personnel all come from large chemical enterprises and possess innate safety awareness
- 4、Collaboration with Head Chemical Design Institute: Standardization+Stress Accounting+Model Computing Power
- 5、We have supplied almost all mainstream material factories and established contacts.



Newmat Nano-Patent For Invention

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NATIONAL INTELLECTUAL PROPERTY ADMINISTRATION, PRC

专利登记簿副本

专利号:ZL202222517702.X　　证书号:18709935

I 著录项目

实用新型名称:　一种邻氯苯腈生产的流化床
申请日:　2022年09月22日
授权日:　2023年03月24日
主分类号:　B01J 19/28(2006.01)
发明人:　王志军、贺肖栋、徐春

专利权人:苏州纽姆特纳米科技有限公司
专利权人地址:江苏省苏州市张家港市大新镇新创路3号
专利权人邮政编码:215600
国籍或注册的国家或地区:中国

II 法律状态
专利权有效

III 其他登记事项

专利权授予
授权公告日期:2023年03月24日

专利权的转移
原专利权人名称:福建贝莱特生物科技有限公司
原专利权人邮政编码、地址:354000,福建省南平市邵武市金塘工业园区

国家知识产权局
专利局登簿专用章

第1页　共3页

证书号第6697722号

发明专利证书

发明名称:一种基于流化床的气相沉淀反应系统
发明人:韩晶,钱震,刘凯,罗修文,王文华,李玉堆,韩开峰
专利号:ZL 2023 1 1507564.X
专利申请日:2023年11月14日
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
授权公告日:2024年02月09日　　授权公告号:CN 117230429 B

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局长
申长雨

2024年02月09日

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其他事项参见续页

证书号第6583038号

发明专利证书

发明名称:基于气相沉积的多层薄膜包覆方法
发明人:韩晶,刘凯,罗修文
专利号:ZL 2023 1 1278574.0
专利申请日:2023年10月07日
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
授权公告日:2023年12月26日　　授权公告号:CN 117026215 B

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2023年12月26日

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其他事项参见续页

证书号第6583764号

发明专利证书

发明名称:基于电池电极的碳纳米电极制备系统
发明人:韩晶,刘凯,罗修文,李玉堆,韩开峰
专利号:ZL 2023 1 1326671.2
专利申请日:2023年10月13日
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
授权公告日:2023年12月26日　　授权公告号:CN 117070915 B

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其他事项参见续页

证书号第6591491号

发明专利证书

发明名称:一种复合碳纳米管的表面精度控制方法
发明人:韩晶,刘凯,罗修文,李玉堆,韩开峰
专利号:ZL 2023 1 1416895.2
专利申请日:2023年10月30日
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
授权公告日:2023年12月29日　　授权公告号:CN 117139573 B

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2023年12月29日

第1页(共2页)

其他事项参见续页

证书号第6697809号

发明专利证书

发明名称:基于流化床的纳米喷雾包覆系统
发明人:韩晶,钱震,刘凯,罗修文,王文华,李玉堆,韩开峰
专利号:ZL 2023 1 1443245.7
专利申请日:2023年11月02日
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
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2024年02月09日

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其他事项参见续页

证书号第7190730号

专利公告信息

发明专利证书

发明名称:基于流化床的粉体材料包覆工艺
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
发明人:刘凯,韩晶,赖宏坤,马新力,罗修文,李伟峰
专利号:ZL 2024 1 0501065.8　　授权公告号:CN 118059770 B
专利申请日:2024年04月25日　　授权公告日:2024年07月12日
申请日时申请人:苏州纽姆特纳米科技有限公司
申请日时发明人:刘凯,韩晶,赖宏坤,马新力,罗修文,李伟峰

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2024年07月12日

第1页(共1页)

证书号第7369616号

专利公告信息

发明专利证书

发明名称:自适应流化床反应器控制系统
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
发明人:刘凯,韩晶,钱震,赖宏坤,马新力,罗修文
专利号:ZL 2024 1 0567390.4　　授权公告号:CN 118142465 B
专利申请日:2024年05月09日　　授权公告日:2024年09月13日
申请日时申请人:苏州纽姆特纳米科技有限公司
申请日时发明人:刘凯,韩晶,钱震,赖宏坤,马新力,罗修文

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2024年09月13日

第1页(共1页)

证书号第7435034号

专利公告信息

发明专利证书

发明名称:基于流化床气相沉积的纳米材料制备方法
专利权人:苏州纽姆特纳米科技有限公司
地址:215600 江苏省苏州市张家港市大新镇新创路3号
发明人:韩晶,刘凯,钱震,赖宏坤,马新力,罗修文,曹跃文
专利号:ZL 2024 1 0702408.7　　授权公告号:CN 118267938 B
专利申请日:2024年06月03日　　授权公告日:2024年10月11日
申请日时申请人:苏州纽姆特纳米科技有限公司
申请日时发明人:韩晶,刘凯,钱震,赖宏坤,马新力,罗修文,曹跃文

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申长雨

2024年10月11日

第1页(共1页)

Coverage of customers and partner institutions

Newmat

Silicon carbon negative electrode

ZhideBattery 致德新能源
杉杉 Shanshan
IOPSILION
国轩高科 GUOXUAN HIGH-TECH
BTR
ECH 洗霸
SHINZOOM
璞泰来 PUTAILAI
KAIJIN 凯金
金龙羽
石大胜华 SHIDA SHENGHUA
XtalPi 晶泰科技
犇星
硅源新能
协鑫 GCL
SoLid 索理德科技
硅宝
银硅科技 Yin Gui Technology
HYCAN 合创
联创锂能 LianChuangLithiumEnergy
陕煤集团
WANHUA
弘康 HON KANG
尚太科技 SHANGTAITECH
Liton 立探新能源
中国五矿 MINMETALS
iAmetal
HENGTRON 珩创
KING 金硅

Porous carbon

BTR
Liton 立探新能源
金龙羽
圣泉集团 SQ GROUP
HIWORLD

solid electrolyte

cell

HUAWEI
蔚来 NIO
CATL 宁德时代

CNT carbon nanotubes

X-Carbon
ochem A MICROVAST COMPANY

colleges and universities

3D Printing

众山精密

THANK YOU!

Newmat Nano

From silicon carbon anode

Advanced powder equipment providers in multiple fields

http://www.newmatnano.com/